

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/061185 A1

(51) International Patent Classification⁷: **B25B 13/46**

(21) International Application Number:
PCT/US2004/004616

(22) International Filing Date: 17 February 2004 (17.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/523,034 18 November 2003 (18.11.2003) US

(71) Applicant (for all designated States except US): JODA ENTERPRISES, INC. [US/US]; 2440 Lakeview Avenue, Chicago, IL 60614 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): DAVIDSON, John, B. [US/US]; 2440 Lakeview Avenue, #3A, Chicago, IL 60614 (US).

(74) Agent: SILLER, Gustavo, Jr.; Brinks Hofer Gilson & Lione, P.O. Box 10087, Chicago, IL 60610 (US).

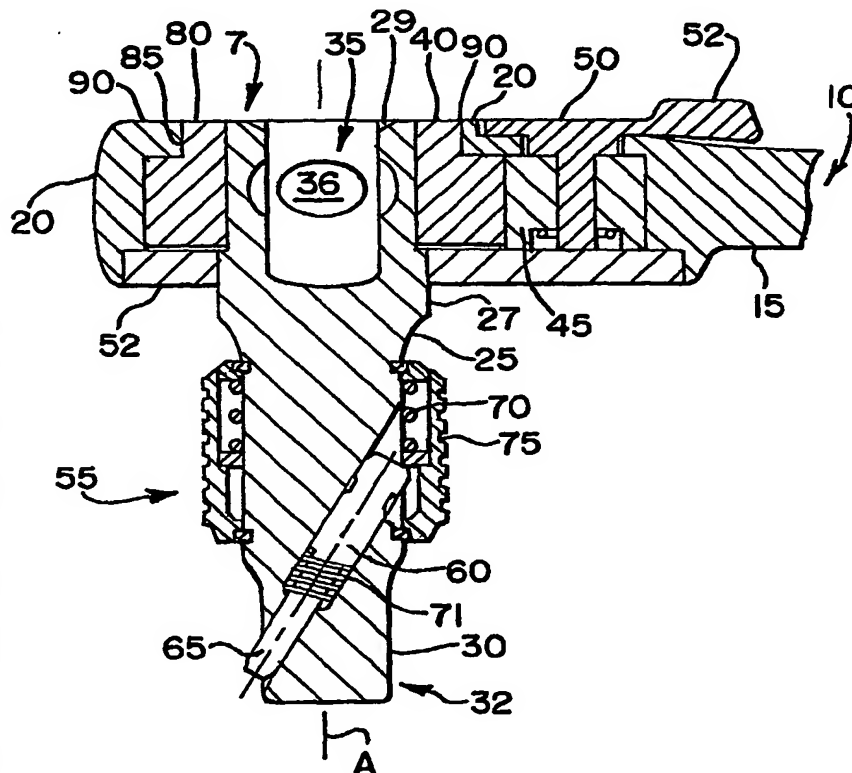
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: RATCHET WRENCH



(57) Abstract: A ratchet wrench has a drive-stud element with a drive stud at a first end and a drive recess at a second end. The drive-stud element is coupled with a one-way drive transmitting wheel to rotate in unison therewith about an axis. The wrench can have a centering element that resists movement of the one-way drive transmitting wheel in at least one direction away from the axis. The drive-stud element and the one-way drive transmitting wheel can be separately formed. A method is also disclosed for operating a ratchet wrench with a drive-stud element with a drive stud at a first end and a drive recess at a second end.

WO 2005/061185 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.